

## CLAIMS:

1. A method of determining the region of interest in images of skin impressions, the skin having ridges and valleys and the images taking the form of image data, values within a first value range being assigned to the ridges and values within a second value range of the image data being assigned to the valleys, characterized in that the values of the overall image are shifted in the direction of the first value range, in that the overall image is divided into tiles, in that mean values of the shifted values for the individual tiles are compared with a reference value and in that those tiles whose mean value deviates relative to the reference value in the direction of the first value range are considered at least on a preliminary basis as belonging to the region of interest.

5

2. A method as claimed in claim 1, characterized in that, to shift the values, each tile is split into a plurality of groups of pixels distributed extensively uniformly over the tiles, in that, for each tile and each group, the minimum of the corresponding values is formed, in that, for each tile, the mean value is calculated by means of the minimum values of the 10 groups and in that the mean value is stored as a property of the respective tile.

15

3. A method as claimed in one of claims 1 or 2, characterized in that, for the tiles not yet deemed to belong to the region of interest, the variance of the gray scale values within each tile in the unchanged image data is calculated and in that an evaluation of these tiles is 20 effected as a function of the mean value, the variance and a reference value in such a way that a difference between the mean value and the reference value, which in itself indicates lack of belonging to the region of interest, may be compensated by an appropriately large variance and a difference which indicates belonging to the region of interest may be compensated by an appropriately small variance.

25

4. A method as claimed in claim 3, characterized in that each tile is then examined as to whether more than five or fewer than six of the tiles surrounding it have been assessed as belonging to the region of interest, wherein in the case of more than five the

examined tile is assessed as belonging to the region of interest and in the case of fewer than six the examined tile is assessed as not belonging to the region of interest.

5. A method as claimed in claim 4, characterized in that the step as claimed in  
5 claim 3 is repeated three times.

6. A method as claimed in claim 5, characterized in that the hitherto determined  
region of interest is investigated for "inlets" and in that tiles lying in "inlets" are assumed to  
belong to the region of interest.

10

7. A method as claimed in claim 6, characterized in that, on each side of the  
hitherto determined region of interest, pointers starting from both ends of the side are in each  
case positioned on the outermost tile determined as belonging to the region of interest,  
wherein the pointers travel towards one another and row by row adopt the position of a tile  
15 lying further outwards or retain the same position in the case of an "inlet" and in that the path  
of the pointers until the pointers meet forms the respective border of the final region of  
interest.